# VARIETY PERFORMANCE GUIDE

Elsoms
The Seed Specialists

## More sustainable for the environment and your bottom line.

Your guide to growing the lower input Group 2 variety.

# MAYFLOWER
Winter Wheat




"Mayflower's early growth habit gives it the edge against weeds, and its overall cleanliness makes for easier management. It's an ideal variety when you're aiming for lower input costs without compromising on milling spec."

**Rhys Jones, Manor Farm, Caxton**

# INTRODUCTION

**Added to the AHDB Recommended List in 2022, Mayflower has steadily built a significant following.**

**Standing out for its exceptional cleanliness, underpinned by the strongest septoria score on the list, Mayflower has earned its place among progressive farmers seeking robust genetics and stronger sustainability credentials. Yet, its full potential remains underappreciated: Mayflower — sustainability at the core, quality in the grain.**

**This guide will explore the features and characteristics that make Mayflower an ideal choice for regenerative farming and for those committed to making responsible, future-focused decisions.**

## MAYFLOWER'S PEDIGREE

**Ascott x Armada**

Mayflower's pedigree introduces novel genetics to the UK, giving growers the opportunity to enhance diversity in their cropping choices.

AHDB RECOMMENDED

# MAYFLOWER
## Winter Wheat

## TOP FEATURES

- Mayflower is the bread wheat, **bred for sustainability**.
- **For progressive regenerative farmers, organic and sustainable farming systems, and sustainable supply chain leaders**, our winter wheat bread variety Mayflower is the ideal choice, combining early maturity and high milling quality with industry-leading disease resistance.
- **The highest septoria resistance** (8.9) of any variety on the AHDB Recommended List.
- **High yield benefits** when drilled early.
- With its **excellent disease resistance** package, Mayflower works well in organic and reduced input systems.

# USE IN REGENERATIVE AGRICULTURE

## SUITABILITY FOR MIN AND NO TILL SYSTEMS

**Minimum tillage and direct drilling can increase the risk of grass weeds, volunteers, and trash-borne diseases. Mayflower combats these well as it offers:**

- Eyespot, Septoria, SBWMV disease resistance.
- Early drilling.
- Prostrate growth habit that supports weed suppression.

## EARLY MATURITY

**Harvesting early in the season means you can establish a cover crop well in advance of autumn drilling or spring planting. This helps with maintaining soil structure, nutrient retention in the soil and to reduce run off/erosion.**

## HIGH DISEASE RESISTANCE

**Mayflower's disease profile means you can reduce inputs across a range of pesticides. Septoria, yellow rust and mildew resistance.**

# SOWING

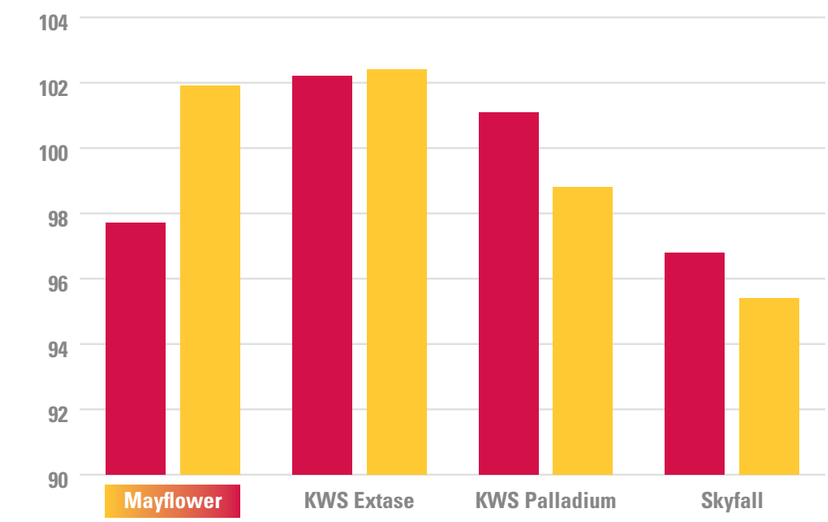
## DRILLING DATE

The market has long recognised the value of varieties that can be drilled in the first week of September. **A requirement for early drilling is a slower speed of autumn development, a trait that Mayflower reliably provides.**

Mayflower delivers a UK **treated yield of 98%** for a quality wheat. When sown early (before 25th September), its yield **increases by over 4%, reaching 102%,** and positioning it among the highest-yielding milling varieties for that drilling window.

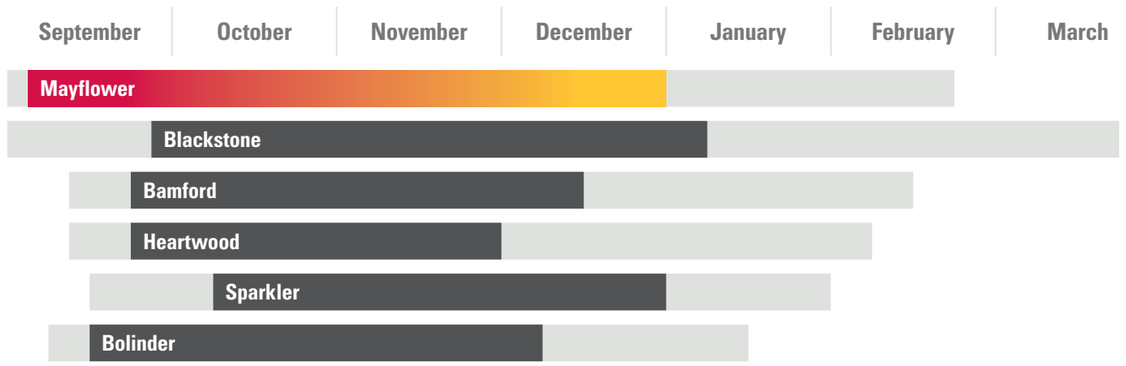
Although Mayflower has a relatively low vernalisation requirement and can be drilled into very late winter (mid-Feb), our recommendation is to drill the variety early. Drilling from the **First week of September into early October has shown the best yield advantages** both on farm and in trials.

### Early sown yield benefit




Source: AHDB Winter wheat Recommended List 2025/2026. N.B KWS Palladium early sown data is very limited.

### Advised sowing date for Mayflower



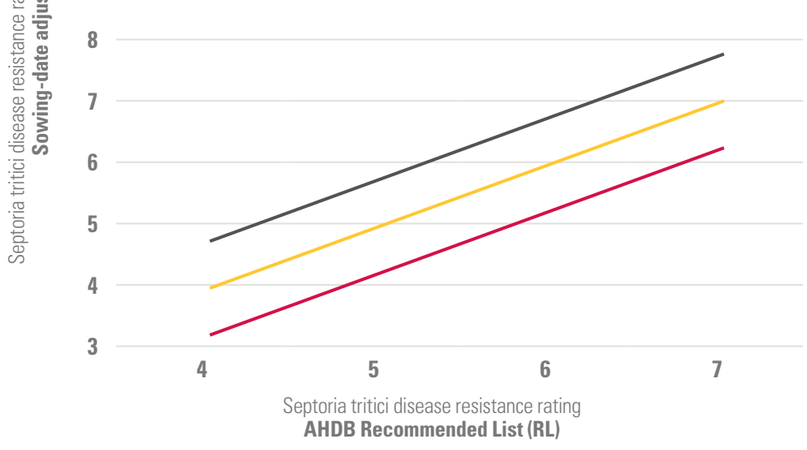
One possible reason for Mayflower's impressive yield advantage when early sown is its outstanding septoria resistance. The AHDB disease ratings are based on an average sowing date of 7th October, and it is recognised that when sown earlier, the effective rating typically decreases by 0.6. **For Mayflower, this adjustment reduces its septoria rating from 8.9 to 8.3** — still higher than the effective rating of any other variety, whether sown in the standard or late drilling window.

## Example of how drilling date effects the septoria rating in varieties

| | Mayflower | Champion |
|---|---|---|
| Early sown | 8.3 | 7.0 |
| Standard sown | 8.9 | 7.6 |
| Late sown | 9.4 | 8.2 |

> Mayflower has proved itself to have the greatest resistance to septoria when sown in the highest risk period, versus the next best variety Champion, sown at the lowest risk period.

## AHDB Knowledge Library Septoria tritici in Winter Wheat




# DRILLING RATES

Mayflower will respond best when drilled using conventional rates across the UK. When sowing Mayflower early, it's important to remember you're targeting a **benchmark of around 750-800 ears/m².** It is generally advised that seed rates should increase as drilling moves later into the season.

## Advised seed rates for Mayflower

| | Light Soil (seeds/m2) | Heavy Soil (seeds/m2) |
|---|---|---|
| Early September | 250 - 300 | 275 - 300 |
| Mid September - Mid October | 300 - 350 | 300 - 350 |
| Mid - Late October | 350 - 375 | 350 - 400 |
| Late October - Mid November | 350 - 400 | 375 - 450 |
| Mid November - Early December | 425+ | 450+ |

# AGRONOMY

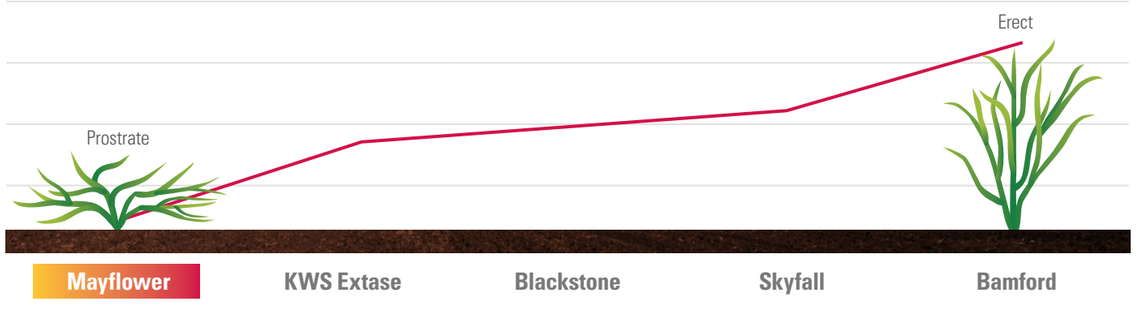
## ROTATIONAL POSITION

**Mayflower is highly adaptable within any rotation.** It can be drilled from early September through to mid-February, offering growers flexibility when planning. As an excellent second cereal option, Mayflower performs well when early sown after barley, a harvested rye crop, or any common break crop grown in the UK. It also benefits from early maturity (0), making it one of the **earliest varieties on the Recommended List,** and increasing its appeal to growers looking to establish a second cereal after wheat — even Mayflower after Mayflower.

## GROWTH HABIT

Mayflower has a prostrate growth habit that offers **good early ground cover, which is important for weed suppression.** This growth habit, combined with its moderate speed of development in the autumn, makes Mayflower an **excellent choice for both early drilling and weed competitiveness.** Mayflower is an above-average tillering variety, and this should be considered alongside its growth habit and the potential disease pressure in your area. Growers should aim to establish an **ear count of around 750–800/m².** Mayflower is a medium-tall variety that can create a denser canopy, so it is important to maintain good airflow through the crop during the season to reduce the risk of disease infection.

## Varieties growth habits, from prostrate to erect




# CULTIVATION METHODS

The UK has seen a surge in popularity in establishing crops via low disturbance systems. These systems work well for a lot of farmers because it means farmers can sow large areas relatively quickly, at lower cost and often earlier in the season. **Mayflower is highly suited to these establishment systems.**

Minimum tillage and direct drilling can increase the risk of grass weeds, volunteers, and trash-borne diseases, as well as limit opportunities for later drilling in the season.

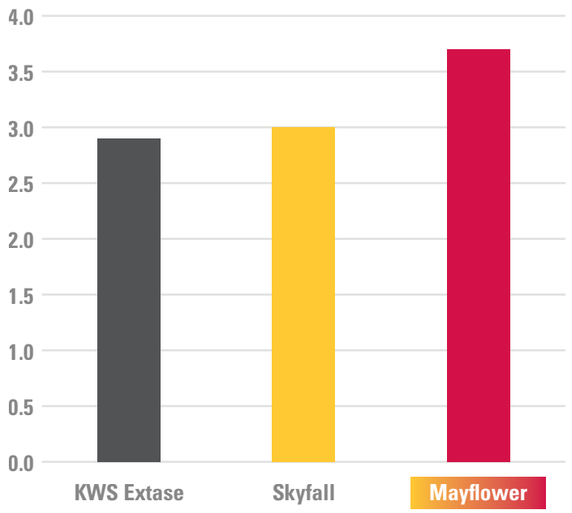
**Grass weeds/volunteers:** Mayflower is an excellent second wheat choice and sits well behind a previous crop of Mayflower. It has also shown some ability to be competitive against grass weeds in organic trials.

**Trash borne diseases:** Mayflower is Pch1 resistant to eyespot which can survive in infected stubble. It also boasts the highest Septoria tritici resistance rating of any variety on the AHDB RL.

## PGRs

Mayflower is a stiff variety but will benefit from the use of PGRs. To support Mayflower's tillering habit, **we advise applying early nitrogen,** although this can increase the risk of lodging. Elsoms recommend a split-dose PGR programme using products containing trinexapac-ethyl and chlormequat. It is important to ensure the timings of these split doses are correct and that they are not applied if the crop is under stress. Depending on the drilling date and crop thickness, it may also be appropriate to apply a third PGR, with a recommendation for a product such as Terpal or a similar alternative. Where a third application is deemed suitable, be aware that applications around flag leaf emergence can cause crop damage and encourage secondary tillering. **Treatments should not be applied when temperatures exceed 21°C**.

### Three year average tiller count




## RATINGS TABLE

| | Untreated Yield (% of treated controls) | Mildew | Yellow Rust | Brown Rust | Septoria tritici | Eyespot | Fusarium Ear Blight | OWBM Resistance |
|---|---|---|---|---|---|---|---|---|
| **Mayflower** | **91** | **7** | **9** | **6** | **8.9** | **5*** | **6** | **-** |
| KWS Extase | 91 | 6 | 7 | 7 | 7.0 | 3 | 6 | - |
| Skyfall | 64 | 6 | 3 | 8 | 5.9 | 6* | 7 | R |
| KWS Dawsum | 89 | 8 | 9 | 7 | 6.3 | 5 | 7 | - |
| Champion | 86 | 5 | 8 | 5 | 7.6 | 4 | 6 | R |

Source: AHDB disease ratings. * Believed to carry the Pch1 Rendezvous resistance gene to eyespot; as this is a breeders' claim, it has not been verified in RL tests.

# DISEASE

## WHAT TO CONSIDER

**Mayflower is one of the top three varieties for untreated yield on the Recommended List at 91%.** A significant part of that performance can be attributed to its **Septoria tritici** and Yellow Rust resistance.

Mayflower holds the highest rating for Septoria tritici on the list at 8.9. High Septoria tritici resistance ratings provide growers with greater flexibility in crop management. They reduce the risks associated with early drilling, allow for greater confidence when drilling into stubble or crop residues, and offer increased options when planning fungicide programmes.

**Mayflower also boasts resistance to eyespot via the Pch1 resistance gene,** further supporting its suitability for early drilling, drilling into stubble, or use as a second cereal. Eyespot can survive on infected stubble or ploughed-in crop residues for up to three years, meaning that both minimum tillage and ploughing can carry risks. Mayflower helps to reduce these risks.

The RL Yellow Rust rating refers to the plant's adult resistance (GS59 and onwards), which for Mayflower is 8.9 (9). The 2024 season brought with it very high Brown Rust pressure from start to finish. Mayflower was no exception to this, as was the case for the majority of the RL. However, we remain confident that Mayflower offers growers good resistance to Brown Rust, with a rating of 6.3 (6). It is still believed that later sowing can help reduce the risk of Brown Rust, as the disease requires live plant material to survive, and Mayflower is suitable for later drilling.

Brown Rust is typically a late-season disease, and thanks to Mayflower's strong resistance to fusarium ear blight (6), a T3 fungicide application can be more focused on Brown Rust if necessary.

Out of the 15 varieties currently recommended for bread milling, only two carry the Sm1 resistance gene for Orange Wheat Blossom Midge. Mayflower is not one of these varieties and will benefit from an insecticide application if thresholds are met. The treatment threshold for milling varieties is one midge per six ears.

# QUALITY

While Mayflower clearly ticks many boxes for growers, it's important not to overlook that it is **a Group 2 bread wheat — and one of the few varieties suitable for ukp export.**

When growing Mayflower for milling we advise following the RB209 recommendations. It performs well with a front heavy fertiliser programme and has been previously compared to Crusoe in the past.

### Milling spec quality parameters

| Grain quality measure | UKFM Group 1/2 | ukp | Mayflower |
|---|---|---|---|
| **Minimum specific weight (kg/hl)** | 76 | 76 | **79.2** |
| **Maximum moisture content (%)** | 15 | 14 | |
| **Maximum admix (%)** | 2 | 2 | |
| **Minimum Hagberg Falling Number (HFN; s)** | 250 | 250 | **299** |
| **Protein content (%)** | 12.5 - 13 | 11.0–13.0 | **12.6** |
| **Chopin Alveograph W** | N/A | 170 (min) | **213** |
| **Chopin Alveograph P/L** | N/A | 0.9 (max) | **0.8** |

# YIELD

## UNTREATED YIELD

In yield rankings, Mayflower sits just behind the highest performers, but its **real advantage lies in its consistency and resilience.** With an untreated yield of 91%, rivalling KWS Extase, it remains one of the **most dependable options for growers aiming to manage input costs without compromising performance.**

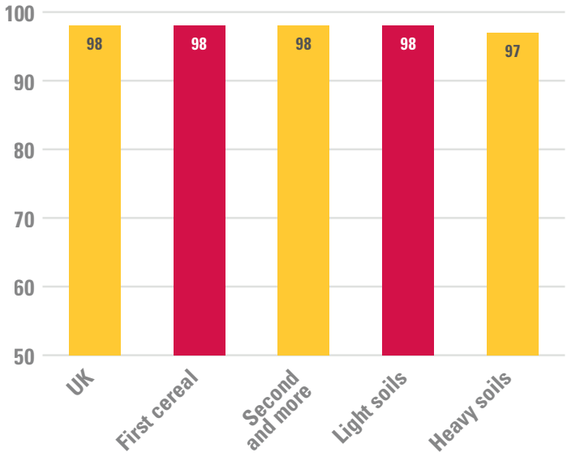
But what happens when we take a closer look at untreated yield? It's one of the most highly valued scores by levy payers and is calculated as a percentage of the mean yield of the treated controls. Depending on how you interpret it, untreated yield can indicate how well a variety might perform under reduced input systems or highlight the potential risk associated with a late or missed fungicide spray.

**Whichever way you look at it, Mayflower stands out. Among all the milling wheats with UK-wide recommendation, Mayflower shows the greatest untreated benefit — with the smallest gap between treated and untreated yields**

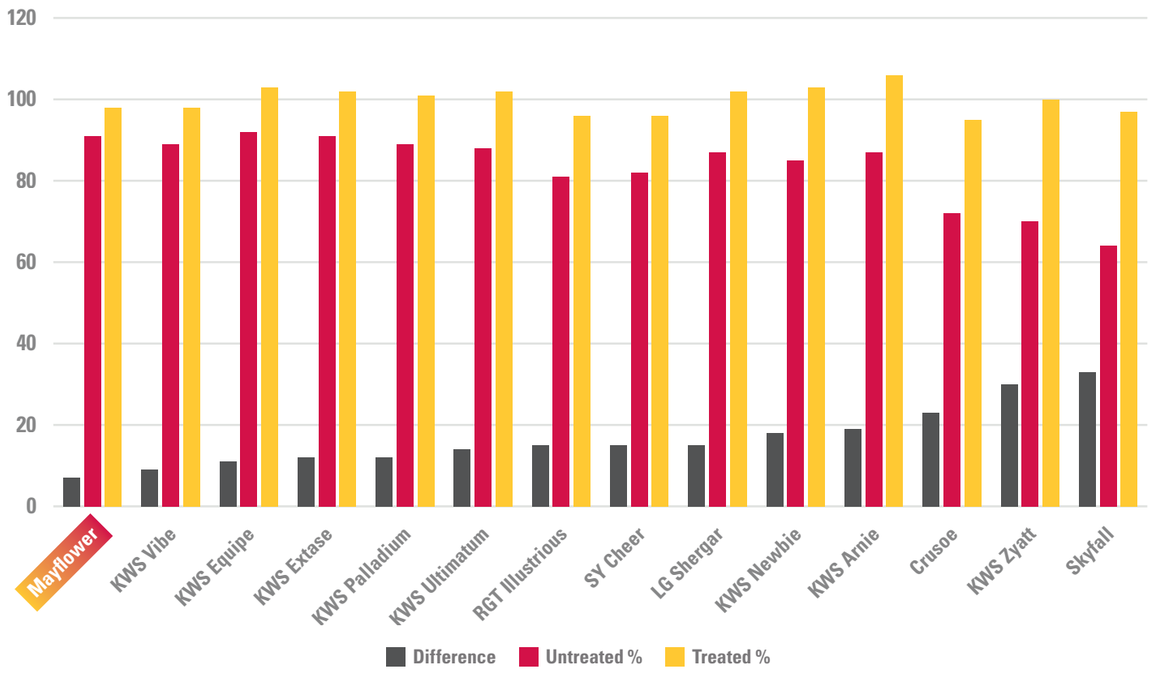
## CONSISTENCY OF PERFORMANCE

Mayflower is also very consistent in it's performance.

### Mayflower's treated yield performance and consistency

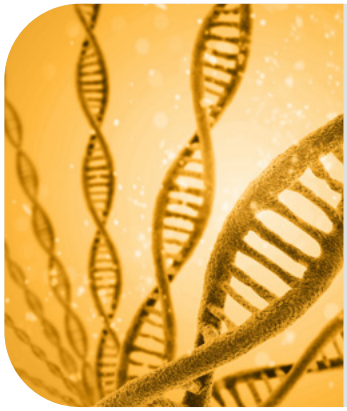



### Untreated vs treated yield % ranked by difference



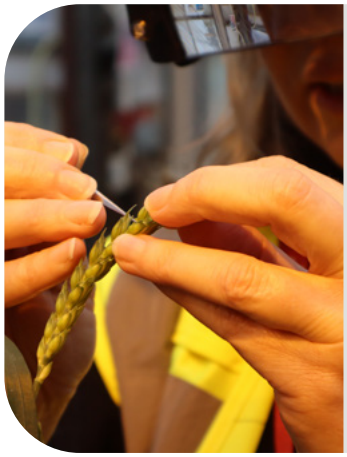

# VARIETIES THAT EXCEED EXPECTATIONS

**We're committed to continued investment in cutting-edge research and development to bring you top-tier winter wheat varieties, like Mayflower.**



## Advanced genomics platform.

Our state-of-the-art genomics platform enables us to accelerate the breeding process, allowing for precise selection of desirable traits. This technology empowers us to develop varieties that deliver superior performance.



## Expert staff and technology.

Our dedicated team of breeders, scientists, and agronomists work tirelessly to develop and refine our varieties. We harness the power of artificial intelligence (AI) and drone technology to enhance our breeding programs and ensure the highest quality standards.

Elsoms WHEAT

## Strength in partnership.

Elsoms' long-term partnerships ensure we rigorously evaluate and validate our wheats' performance through extensive testing in various scenarios and conditions. Elsoms has access to a huge resource of data and knowledge. Our partnerships also give us access to a wide variety of breeding material from across the world allowing us to keep developing new varieties year on year, bringing beneficial new traits to market.

# Speak to the specialists

**For any questions about Mayflower Winter Wheat or to discuss the portfolio, contact the team today:**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